

## PROJECT ADMINISTRATION DATA SHEET



ORIGINAL



REVISION NO. \_\_\_\_\_

Project No. A-3400GTRI/~~GTR~~DATE 11/29/82Project Director: Dr. J. A. Knight~~School~~ Lab EMSLSponsor: American Can Co.Greenwich, Conn. 06830Type Agreement: Standard Agreement dtd 11/2/82Award Period: From 11/2/82 To 2 /2/83 (Performance) \_\_\_\_\_ (Reports) \_\_\_\_\_Sponsor Amount: Total Estimated: \$ 35,381Funded: \$ 35,381

Cost Sharing Amount: \$ \_\_\_\_\_

Cost Sharing No: \_\_\_\_\_

Title: Blue IV Pyrolysis Pilot Plant Operation

## ADMINISTRATIVE DATA

OCA Contact

Linda H. Bowman x4820

## 1) Sponsor Technical Contact:

## 2) Sponsor Admin/Contractual Matters:

Dr. George M. MallanSameAmerican Can CompanyAmerican LaneGreenwich, Conn 06830(203) 552-2366Defense Priority Rating: noneMilitary Security Classification: none

(or) Company/Industrial Proprietary: \_\_\_\_\_

## RESTRICTIONS

See Attached NA Supplemental Information Sheet for Additional Requirements.

Travel: Foreign travel must have prior approval – Contact OCA in each case. Domestic travel requires sponsor approval where total will exceed greater of \$500 or 125% of approved proposal budget category.

Equipment: Title vests with Sponsor; however, none proposed *X*

## COMMENTS:



## COPIES TO:

Research Administrative Network  
Research Property Management  
Accounting  
Procurement/EES Supply ServicesResearch Security Services  
Reports Coordinator (OCA)  
GTRI  
LibraryResearch Communications (2)  
Project File  
Other *ing. Dir*  
Other \_\_\_\_\_

SPONSORED PROJECT TERMINATION SHEET

Date 3/21/83

Project Title: Blue IV Pyrolysis Pilot Plant Operations

Project No: A-3400

Project Director: Dr. J. A. Knight

Sponsor: American Can Co.

Effective Termination Date: 2/2/83

Clearance of Accounting Charges: 2/28/83

Grant/Contract Closeout Actions Remaining:

- ☒ Final Invoice and Closing Documents
- ☐ Final Fiscal Report
- ☒ Final Report of Inventions
- ☐ Govt. Property Inventory & Related Certificate
- ☐ Classified Material Certificate
- ☐ Other \_\_\_\_\_

Assigned to: EMSL (School/Laboratory)

COPIES TO:

Administrative Coordinator  
Research Property Management  
Accounting  
Procurement/EES Supply Services

Research Security Services  
Reports Coordinator (OCA)  
Legal Services (OCA)  
Library

EES Public Relations (2)  
Computer Input  
Project File  
Other Brought

# Georgia Institute of Technology

ENGINEERING EXPERIMENT STATION

ATLANTA, GEORGIA 30332

December 23, 1982

Richard W. LaPointe  
Director of Transportation  
Procurement & Transportation Department  
AMERICAN CAN COMPANY  
American Lane  
Greenwich, Connecticut 06830

Subject: November Report, Blue IV Pyrolysis Pilot Plant Operation

Dear Mr. LaPointe:

During November, the following tasks were either accomplished or initiated:

1. A supply of peanut hulls was purchased and stored on site.
2. The hardwood chips, which had been delivered in a trailer to the Georgia Tech campus prior to the time the project was authorized, were unloaded and stored.
3. Moisture content of each of nine bags of the chips, selected at random, was determined. The moisture varied from 9.7% to 15.1% with an average value of 12.8%.
4. The servicing and repair of the Blue IV pyrolysis pilot plant was initiated. This work includes a detailed check-out of the entire system. A major part of this task is the required repair work for the reactor.
5. The gas condensation trains that are used to sample the off-gas stream of the pilot plant were assembled, and their operation checked out.

The plans for December are to complete the servicing and repair of the pilot plant; screen the peanut hulls to obtain a quantity of the larger size peanut hull particles to mix with the hardwood chips in the second pilot plant run; operate the pilot plant and process the hardwood chips and a mixture of hardwood chips and peanut hulls; and start the analysis of the feedstocks and pyrolytic products after the two experimental runs are completed.

Sincerely,

✓ James A. Knight ✓  
Principal Research Scientist  
Bioengineering Division  
Energy and Materials Sciences Laboratory

JK:JK



ENGINEERING EXPERIMENT STATION  
Georgia Institute of Technology  
A Unit of the University System of Georgia  
Atlanta, Georgia 30332

January 6, 1983

Richard W. LaPointe  
Director of Transportation  
Procurement & Transportation Department  
AMERICAN CAN COMPANY  
American Lane  
Greenwich, Connecticut 06830

Subject: December Report, Blue IV Pyrolysis Pilot Plant Operation

Dear Mr. LaPointe:

During December, the following tasks were either completed or started:

1. The serving and repair of the pilot plant, including the reactor work, was completed.
2. Peanut hulls were screened with a Sweco screener to separate peanut hulls of +8 mesh size and those of 8 x 10 mesh size. The material that is less than 10 mesh is too fine to use as a feed stock in Blue IV.
3. Preliminary start-up operations were conducted on December 9, 10 and 13th. During these operations, water leaks developed in two air tubes, which were replaced. An electrical motor on the char output system failed and was replaced. The unit was then operated several hours on December 13th.
4. An experimental run of eight hours with hardwood chips was conducted with the Blue IV pilot plant on December 14th. An experimental run with 90% hardwood chips and 10% peanut shells on a weight basis was started on December 15th. An electrical motor on the air compressor failed about 30 minutes after the run was underway, and the pilot plant was shut down. The motor was replaced, and the eight hour run was conducted on December 16th. Gas samples of the off-gas stream were taken for each of the above runs.

(Cont'd.)

5. The chemical analytical work was started with the pyrolytic gas samples, char products, pyrolytic oil products and feedstock samples.

In January, the chemical analytical work will be completed, and a report of the results will be prepared for each run.

Sincerely,

 James A. Knight  
Principal Research Scientist  
Bioengineering Division  
Energy and Materials Sciences Laboratory

JAK:JK



ENGINEERING EXPERIMENT STATION  
**Georgia Institute of Technology**  
A Unit of the University System of Georgia  
Atlanta, Georgia 30332

January 31, 1983

Richard W. LaPointe  
Director of Transportation  
Procurement & Transportation Department  
AMERICAN CAN COMPANY  
American Lane  
Greenwich, Connecticut 06830

Subject: January Report, Blue IV Pyrolysis Pilot Plant Operation

Dear Mr. LaPointe:

During January, the following tasks were completed:

1. The chemical analyses of the feedstocks and pyrolytic products for both of the pyrolysis experiments conducted in December were completed.
2. Material and energy balances were made for each of the experimental runs.
3. A final report on the experimental runs and the results was prepared and sent to your attention January 10, 1983.

Sincerely,

James A. Knight  
Principal Research Scientist  
Bioengineering Division  
Energy and Materials Sciences Laboratory

JAK:JK